

ABSTRACT

An electron beam emitting apparatus has a first plate with an electron-emitting device 15, and an electrode 8 opposed to the first plate, and the electrode 8 is applied a potential to accelerate electrons emitted from the electron-emitting device 15. In the electron beam emitting apparatus, a potential defining region 9 is provided a surface of the first plate on the electrode 8 side and a first potential defining region forming the potential defining region 9 is provided in a projective area of the electrode 8 onto the potential defining region 9; and, where d represents a distance between the electrode 8 and the potential defining region 9, an additional potential defining region is defined in the range of $0.83d$ in all directions parallel to the first plate from the edge of the projective area of the electrode 8 onto the potential defining region 9. This stabilizes trajectories of electrons and permits an excellent image to be formed without deviation of light emission positions.